

## Claims

1. A manufacturing method for electrodes that inhibit corona effect on ceramic capacitor includes steps as follows:
  - the surface of the two electrodes of a ceramic capacitor is coated with conductive paste by a printing process under viscosity control. More specifically, the surface of electrodes of a common ceramic capacitor sintered with diameter of 3 mm~30 mm and thickness of 0.8 mm~15 mm is coated with conductive silver or copper paste by a printing process under viscosity control;
  - 10 the conductive paste covered two electrodes of the ceramic capacitor is subject to a sintering process to reduce into silver or copper electrode, so the cross-section of the two electrodes is completely covered with conductive paste without leakage at outer edge and corona effect is inhibited.
2. As described in claim 1 for a manufacturing method for electrodes that inhibit corona effect on ceramic capacitor, the silver paste in the conductive paste takes up about 40%~80% and has a viscosity about 10,000~200,000 cps, so the silver paste is completely applied to the cross-section of the two electrodes of a ceramic capacitor in 1 um~50 um thickness and does not create leakage problem.
- 20 3. As described in claim 1 for a manufacturing method for electrodes that inhibit corona effect on ceramic capacitor, the copper paste in the conductive paste

takes up about 40%~85% and has a viscosity about 10,000~200,000 cps, so the silver paste is completely applied to the cross-section of the two electrodes of a ceramic capacitor in 1 um~50 um thickness and does not create leakage problem.

5 4. As described in claim 1 for a manufacturing method for electrodes that inhibit corona effect on ceramic capacitor, the procedures are as follows:

the surface of electrodes of a common ceramic capacitor 1 sintered with diameter of 3 mm~30 mm and thickness of 0.8 mm~15 mm is coated with conductive silver or copper paste by a printing process under viscosity control;

the conductive paste covered two electrodes of the ceramic capacitor is subject to sintering at 150~850°C to reduce into silver or copper electrode;

the leakage electrode layer at outer edge of the ceramic capacitor is subject to polishing treatment by a 200~1500  $\mu$ m, 5~100 rpm diamond polishing wheel. The coating overflow area at outer edge of the ceramic capacitor 1 is polished by 0.05 mm~1.0 mm in depth. Thus, the electrode is successfully produced to inhibit corona effect by coating conductive paste on the cross-section of the two electrodes of the ceramic capacitor 1 without leakage problem.

20 5. As described in claim 1 for a manufacturing method for electrodes that inhibit corona effect on ceramic capacitor, the viscosity of the silver or copper paste

is controlled to be about 8,000~150,000 cps, so the surface of the two electrodes of a ceramica capacitor is a 1  $\mu\text{m}$ ~50  $\mu\text{m}$  thick conductive layer without any leakage problem.

6. As described in claim 1 for a manufacturing method for electrodes that inhibit 5 corona effect on ceramic capacitor, the procedures are as follows:

the nickle or copper surface of the two electrodes of a common ceramic capacitor sintered with diameter of 3 mm~30 mm and thickness of 0.8 mm ~15 mm is subject to chemical electroless electroplating or vacuum deposition, so the electrodes have a 1  $\mu\text{m}$ ~50  $\mu\text{m}$  thick conductive layer;

10 the covered electrodes of a ceramic capacitor is subject to a drying process;

the leakage electrode layer at outer edge of the ceramic capacitor is subject to polishing treatment by a 200~1500  $\mu\text{m}$ , 5~100 rpm diamond polishing wheel; the coating overflow area at outer edge of the ceramic capacitor is polished off; thus, the electrode is successfully produced to inhibit corona 15 effect by coating conductive paste on the cross-section of the two electrodes of the ceramic capacitor without leakage problem.